

Comparisons of Job Characteristics

Focus Occupation: [Sheet Metal Workers \(47-2211\)](#)

Associated Occupation: [Boilermakers \(47-2011\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 96

Focus Occupation: Sheet Metal Workers (47-2211)

Associated Occupation: Boilermakers (47-2011)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Mechanical	6.8	17.5	17.4	0	Current knowledge level may be sufficient
Building and Construction	4.0	13.8	16.5	>	Current knowledge level is likely sufficient
Engineering and Technology	5.7	12.6	13.5	0	Current knowledge level may be sufficient
Design	5.2	11.9	14.9	>	Current knowledge level is likely sufficient
Physics	4.3	7.6	7.3	0	Current knowledge level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 58

Focus Occupation: Sheet Metal Workers (47-2211)

Associated Occupation: Boilermakers (47-2011)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Operation and Control	5.4	11.4	7.4	<<	Extensive development of skills in this area may be required
Operation Monitoring	6.6	11.1	7.2	<<	Extensive development of skills in this area may be required
Quality Control Analysis	5.9	10.6	8.5	<	A higher skill level may be required
Troubleshooting	4.5	9.6	6.9	<<	Extensive development of skills in this area may be required
Equipment Maintenance	3.5	9.3	7.4	<	A higher skill level may be required
Repairing	3.4	9.2	6.9	<<	Extensive development of skills in this area may be required
Equipment Selection	3.3	8.0	6.4	<	A higher skill level may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 81			
Focus Occupation: Sheet Metal Workers (47-2211) Associated Occupation: Boilermakers (47-2011)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Arm-Hand Steadiness	6.8	11.8	9.5	<	Some improvement in abilities may be required
Control Precision	6.6	11.5	10.0	<	Some improvement in abilities may be required
Manual Dexterity	6.5	10.4	9.5	0	Current ability level may be sufficient
Multilimb Coordination	6.0	10.3	9.8	0	Current ability level may be sufficient
Reaction Time	4.8	8.9	8.8	0	Current ability level may be sufficient
Extent Flexibility	4.8	8.7	9.1	0	Current ability level may be sufficient
Response Orientation	4.0	7.7	6.4	<	Some improvement in abilities may be required
Gross Body Equilibrium	3.2	6.6	7.3	>	Current ability level is likely sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 90
Focus Occupation: Sheet Metal Workers (47-2211) Associated Occupation: Boilermakers (47-2011)		
Work Activities	Exclusivity of Activity	
Adhere to safety procedures	12	
Build or repair structures in construction, repair, or manufacturing setting	54	
Cut metal or plastic	77	
Determine project methods and procedures	76	
Fabricate sheet metal parts or items	80	
Fabricate, assemble, or disassemble manufactured products by hand	11	
Identify base metals for welding	68	
Identify properties of metals for repair or fabrication activities	71	
Lay out machining, welding or precision assembly projects	63	
Make independent judgment in assembly procedures	64	
Move or fit heavy objects	8	
Perform safety inspections in industrial, manufacturing or repair setting	32	
Position, align, or level machines, equipment, or structures	74	
Read blueprints	10	
Read technical drawings	7	

Recognize characteristics of alloys	71
Recognize characteristics of metals	62
Stretch, bend, straighten, shape, pound, or press metal or plastic	84
Understand technical operating, service or repair manuals	6
Use acetylene welding/cutting torch	54
Use arc welding equipment	62
Use combination welding procedures	68
Use hand or power tools	2
Use precision measuring tools or equipment	17
Weld together metal parts, components, or structures	54

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 92

Focus Occupation: Sheet Metal Workers (47-2211)
Associated Occupation: Boilermakers (47-2011)

Tools and Technologies	Exclusivity
Computers	1
Content authoring and editing software	1
Cutting and crimping and punching tools	3
Cutting tools	18
Dispensing tools	6
Drafting supplies	9
Face and head protection	7
Forming tools	2
Gas analyzers and monitors	10
Hearing protectors	12
Holding and clamping tools	3
Indicating and recording instruments	2
Industry specific software	1
Ladders and scaffolding	6
Length and thickness and distance measuring instruments	2
Lifting equipment and accessories	3
Machine tools	7
Machinery for working wood and stone and ceramic and the like	12
Marking tools	11
Measuring and layout tools	3
Metal bending and forming machinery	17
Non destructive examination equipment	13
Pneumatic tools	8
Power tools	2
Pressure measuring and control instruments	10
Rough and finishing tools	5

Safety apparel	4
Soldering and brazing and welding machinery and supplies	6
Special tooling fixtures	16
Vision protection and accessories	3
Wrenches and drivers	2

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.